STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF MANAGEMENT AND BUDGET
STATE PLANNING COORDINATION

December 3, 2007

Mr. Mark Davidson
Design Consultants Group, Inc.
18072 Davidson Drive
Milton, De 19968

RE: PLUS review – PLUS 2007-10-06; Smith Tract

Thank you for meeting with State agency planners on October 31, 2007 to discuss the proposed plans for the Smith Tract project to be located on the west side of Sussex County Road 48.

According to the information received, you are seeking a rezoning of 40 acres from AR-1 to C-1 for a mixed residential subdivision of affordable housing and 311,340 sq. ft. of commercial.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as Sussex County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.

Executive Summary

The following section includes some site specific highlights from the agency comments found in this letter. This summary is provided for your convenience and reference. The full text of this letter represents the official state response to this project. ***Our office***

notes that the applicants are responsible for reading and responding to this letter and all comments contained within it in their entirety.

State Strategies/Project Location

- The Office of State Planning and Coordination recognizes the proposed project requesting a zoning change from AR-1 to C-1 is located within a Level 1 Investment area near the City of Georgetown. This office has no objection to the proposed zoning change; however, this office would request the developer to begin to formally engage conversations with the Town of Georgetown to address the several key issues they have raised regarding annexation, water supply and sewer service. As noted in the letter provided by the Town of Georgetown dated October 24, 2007, the Town has no record of the developer beginning to work with the local community to address any of their concerns. This office offers it assistance to work to address the Town's concerns as well as any concerns the developer may have in an effort to reach an agreeable medium for both parties in relation to the proposed. If you have any questions or would require this office's assistance please call.

Street Design and Transportation

- Zoar Road is a local road. DelDOT's policy is to require dedication of sufficient land to provide a minimum right-of-way width of 30 feet from the centerline on local roads. Therefore they will require right-of-way dedication along the frontage to provide any additional width needed from this project. The plan included with the PLUS application appears to address this requirement.

- DelDOT will also require a 15-foot wide permanent easement across the frontage of the site for a future 10-foot wide shared use path, and possibly the construction of that path. The developer should contact Mr. Derek Sapp, The DelDOT Subdivision Manager for western Sussex County, for specific requirement in this regard. Mr. Sapp may be reached at (302) 760-4803.

- A traffic impact study has been submitted for the proposed development and is now under review. DelDOT anticipates sending comments to Sussex County in five to six weeks.

- Without prejudging the TIS results, the developer should anticipate a-requirement to improve Zoar Road to meet DelDOT's local road standards. This requirement includes but is not limited to 11-foot lanes and 5-foot

shoulders. Generally DelDOT requires this sort of improvement only within the limits of the site frontage but, depending on the results of the traffic impact study, improvements further removed from the site may be necessary.

- Splitter islands should be provided at the proposed roundabout to direct traffic the proper way around the roundabout.

Natural and Cultural Resources

- Have all drainage easements recorded on deeds and place restrictions on obstructions within the easements to ensure access for periodic maintenance or future re-construction. Future property owners may not be aware of a drainage easement on their property if the easement is only on the record plan. However, by recording the drainage easement on the deed, the second owner, and any subsequent owner of the property, will be fully aware of the drainage easement on their property.

The following are a complete list of comments received by State agencies:

Office of State Planning Coordination – Contact: Bryan Hall 739-3090

The Office of State Planning and Coordination recognizes the proposed project requesting a zoning change from AR-1 to C-1 is located within a Level 1 Investment area near the City of Georgetown. This office has no objection to the proposed zoning change; however, this office would request the developer to begin to formally engage conversations with the Town of Georgetown to address the several key issues they have raised regarding annexation, water supply and sewer service. As noted in the letter provided by the Town of Georgetown dated October 24, 2007, the Town has no record of the developer beginning to work with the local community to address any of their concerns. This office offers it assistance to work to address the Town's concerns as well as any concerns the developer may have in an effort to reach an agreeable medium for both parties in relation to the proposed. If you have any questions or would require this office's assistance please call.

Division of Historical and Cultural Affairs – Contact: Terrance Burns 739-5685

In reference to this particular parcel, the historic resources at State Historic Preservation Office of the Division of Historic & Cultural Affairs did show and indicate the following:

- There was no indication of a known Archaeological site or National Register listed property on or within parcel, but this parcel is still in a vicinity where it is a possibility that there could be a potential archaeological site on this parcel, or nearby it.
- The developer should be aware of Delaware's Unmarked Human Remains Act of 1987, which governs the discovery and disposition of such remains. The unexpected discovery of unmarked human remains during construction can result in significant delays while the process is carried out.
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- Prior to any demolition or ground-disturbing activities, or before any type of construction proceeds the developer may want to hire an archaeological consultant to check or examine this parcel/property (project area) for the possibility of a cemetery here, or to see if there are any archaeological sites on it.

The State Historic Preservation Office of the Division of Historic & Cultural Affairs recommends and do hope that the developer will take these comments in to consideration. Also, if the developer would like to discuss this in further detail, contact Mr. Terence Burns, Information Resource Specialist, at the State Historic Preservation Office of the Division of Historic & Cultural Affairs at (302) 736-7400.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

1) The proposed plan is a significant improvement over the one presented in January. DelDOT particularly appreciates the addition of rain gardens and the increased landscaping of the parking areas.

2) Zoar Road is a local road. DelDOT's policy is to require dedication of sufficient land to provide a minimum right-of-way width of 30 feet from the centerline on local roads. Therefore they will require right-of-way dedication along the frontage to provide any additional width needed from this project. The plan included with the PLUS application appears to address this requirement.

3) DelDOT will also require a 15-foot wide permanent easement across the frontage of the site for a future 10-foot wide shared use path, and possibly the construction of that path. The developer should contact Mr. Derek Sapp, The DelDOT Subdivision Manager for western Sussex County, for specific requirement in this regard. Mr. Sapp may be reached at (302) 760-4803.

4) A traffic impact study has been submitted for the proposed development and is now under review. DelDOT anticipates sending comments to Sussex County in five to six weeks.

5) Without prejudging the TIS results, the developer should anticipate a requirement to improve Zoar Road to meet DelDOT's local road standards. This requirement includes but is not limited to 11-foot lanes and 5-foot shoulders. Generally DelDOT requires this sort of improvement only within the limits of the site frontage but, depending on the results of the traffic impact study, improvements further removed from the site may be necessary.

6) Splitter islands should be provided at the proposed roundabout to direct traffic the proper way around the roundabout.

7) The developer's site engineer should contact Mr. Sapp regarding specific requirements for entrance improvements.

The Department of Natural Resources and Environmental Control – Contact: Kevin Coyle 739-9071

Soils

Based on the Sussex County soil survey update, Ingleside, Hammonton, Hurlock and Mullica were mapped in the immediate vicinity of the proposed construction. Ingleside is a well-drained upland soil that, generally, has few limitations for development. Hammonton is a moderately well-drained soil that has moderate limitations for development. Hurlock and Mullica are poorly- to very poorly-drained wetland associated (hydric) soils that have severe limitations for development. Approximately 60-70% of the soils mapped on subject parcel are Hurlock/Mullica. Hurlock and Mullica soils are considered unsuitable for development and should be avoided.

Based on the Statewide Wetland Mapping Project (SWMP) mapping, no wetlands were mapped on this parcel. Although no wetlands were mapped by the SWMP, most of the soils on this parcel are poorly to very poorly drained and indicative of wetland conditions.

As mentioned previously, most of the mapped soils on the combined parcel land area are mapped as poorly to very poorly-drained hydric Hurlock or Mullica soils (estimated 60-70%). Hydric soils typically have a seasonal high water table at or near the soil surface (within one-foot of soil surface or less). Building in such soils is likely to leave

prospective residents of this and adjoining properties susceptible to future flooding problems from groundwater-driven surface water ponding, especially during extended periods of high-intensity rainfall events such as tropical storms/hurricanes or "nor'easters." This is in addition to increased flooding probabilities from surface water runoff emanating from future created forms of structural imperviousness (roof tops, roads, sidewalks, and stormwater management structures).

Based on the Chapter 99, Section 16A of the Sussex County Code (paraphrased), lands compromised by improper drainage or flooding potential pose significant threats to the safety and general welfare of future residents and, therefore, shall not be developed. Soils mapped as Mullica and Hurlock fit the criterion for improper drainage or high flooding potential, and should be avoided. The Watershed Assessment Section believes permitting development on such soils would be inconsistent with the above-mentioned regulatory guidelines in the Sussex County Code.

Impervious Cover

Based on information provided by the applicant in the PLUS application form, this projects post-development surface imperviousness is estimated to reach 56 percent. However, given the scope and density of this project (i.e., when viewing the conceptual project layout in the context of the total land area) this estimate appears to be a significant underestimate. When calculating surface imperviousness, it is important to include all forms of constructed surface imperviousness (i.e., rooftops, sidewalks, stormwater management structures, ponds, and roads) in the calculation for surface imperviousness; this will ensure a realistic assessment of this project's likely post-construction environmental impacts. Therefore, surface imperviousness should be recalculated to include al of the above-mentioned forms of constructed surface imperviousness.

Studies have shown a strong relationship between increases in impervious cover to decreases in a watershed's overall water quality. It is strongly recommended that the applicant implement best management practices (BMPs) that reduce or mitigate some of its most likely adverse impacts. Reducing the amount of surface imperviousness through the use of pervious paving materials ("pervious pavers") in lieu of asphalt or concrete in conjunction with an increase in forest cover preservation or additional tree plantings are some examples of practical BMPs that could easily be implemented to help reduce surface imperviousness.

ERES Waters

This project is located adjacent to receiving waters of the Inland Bays designated as waters having Exceptional Recreational or Ecological Significance (ERES). ERES

waters are recognized as special assets of the State, and shall be protected and/ or restored, to the maximum extent practicable, to their natural condition. Provisions in Section 5.6 of Delaware's "Surface Water Quality Standards" (as amended July 11, 2004), specify that all designated ERES waters and receiving tributaries develop a "pollution control strategy" to reduce non-point sources of pollutants through implementation of Best Management Practices (BMPs). Best Management Practices as defined in subsection 5.6.3.5 of this section, expressly authorizes the Department to provide standards for controlling the addition of pollutants and reducing them to the greatest degree achievable and, where practicable, implementation of a standard requiring no discharge of pollutants.

TMDLs

Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Inland Bays Watershed. A TMDL is the maximum level of pollution allowed for a given pollutant below which a "water quality limited water body" can assimilate and still meet water quality standards to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. Although TMDLs are required by federal law, states are charged with developing and implementing standards to support these desired use goals. This project is located in the high nutrient reduction area requiring an 85 and 65 percent reduction in nitrogen and phosphorus, respectively. Additionally, a 40 percent reduction in bacteria will also be required.

Compliance with TMDLs through the PCS

As stated above Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Inland Bays Watershed. The TMDL calls for an 85 percent reduction in nitrogen and a 65% reduction in phosphorus from baseline conditions. Additionally, a 40 percent reduction in bacteria will also be required from baseline conditions. A Pollution Control Strategy (PCS) will provide the regulatory framework for achieving them. Additional nutrient reductions may be possible through the implementation of Best Management Practices such as wider vegetated buffers along watercourses (or ditches), increasing passive, wooded open space that reduce surface imperviousness (i.e., pervious pavers), and the use of green-technology stormwater management technologies.

The Department has developed an assessment tool to evaluate how your proposed development may reduce nutrients to meet the TMDL requirements. Contact Lyle Jones at 302-739-9939 for more information on the assessment tool.

Water Resource Protection Areas

The Water Supply Section has determined that the project falls largely within a wellhead protection area for Georgetown Water (see following map and attached map). Wellhead protection areas are surface and subsurface areas surrounding a public water supply well where the quantity and quality of ground water moving toward these wells may be adversely affected by land use activities.

DNREC recommends that the portion of the new development within the wellhead protection area not exceed 20% impervious cover (DNREC, 2005). Some allowance for augmenting ground-water recharge should be considered if the impervious cover exceeds 20% but is less than 50% of that portion of the parcel within this area. However, the development should not exceed 50% regardless. A water balance calculation will be necessary to determine the quantity of clean water to be recharged via a recharge basin. The purpose of an impervious cover threshold is to minimize loss of recharge (and associated increases in stormwater) and protect the quality and quantity of ground water and surface water supplies.

The change from cropland to the proposed commercial use will introduce petroleum hydrocarbons that are associated with commercial land use (DNREC, 1999). The Source Water Assessment Report for Georgetown Water shows that this well draws from an unconfined aquifer and has a rating of moderately susceptible to contamination with a high vulnerability rating (DNREC, 2003). This development as proposed has the potential to increase these ratings and may cause the Public Drinking Water System to exceed drinking water standards.

The proposed development would change the impervious over from 0% to approximately 37%. The developer provided these numbers on the PLUS application form. This appears to be an underestimation. Ideally, relocating any open space areas to the part of the parcel within the wellhead protection area would decrease the total impervious area in the wellhead protection area. Augmenting the ground-water recharge with clean rooftop run-off systems are another alternative to reducing the total impervious cover.

The proposed site plans show the use of bio-filtration basins for storm water management within the wellhead protection area. If a problem were to occur in the storm water system that released contaminants, they would pose a likely threat to the quality of water drawn by Georgetown Water from this well.

In addition, because the wellhead protection area the source of public drinking water, the storage of hazardous substances or wastes should not be allowed within the area unless specific approval is obtained from the relevant state, federal, or local program.

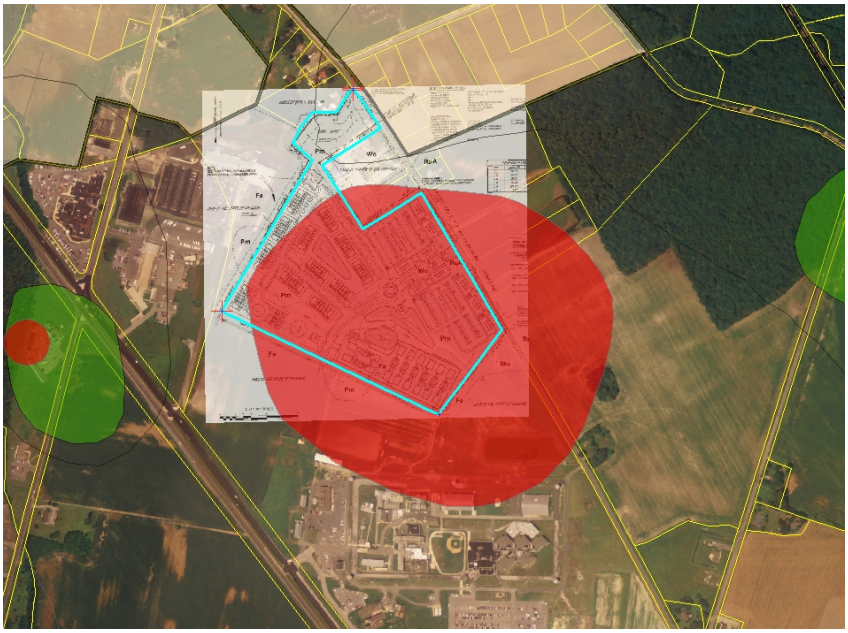
References

Delaware Department of Natural Resources and Environmental Control. (1999). *The State of Delaware Source Water Assessment Plan*: Dover, DE, p. 301.
http://www.wr.udel.edu/swaphome/publications.html

Department of Natural Resources and Environmental Control. (2003). *Public Water Supply Source Water Assessment for Georgetown Water*. p.39.

Delaware Department of Natural Resources and Environmental Control (2005): Source Water Protection Guidance Manual for the Local Governments of Delaware: Dover, DE, 144 p.
http://www.wr.udel.edu/publications/SWAPP/swapp_manual_final/swapp_guidance_manual_final.pdf

Map of Smith Tract (PLUS 2007-10-06) as it impacts the wellhead protection area. The dark red area shows the wellhead protection area.



Water Supply

The project information sheets state that water will be provided to the project by the Town of Georgetown via a public water system. DNREC records indicate that the project site is not located in an area where public water service is available. Any public water utility providing water to the site must obtain a Certificate of Public Convenience and Necessity (CPCN) from the Public Service Commission. Information on CPCNs and the application process can be obtained by contacting the Public Service Commission at 302-739-4247. Should an on-site public/miscellaneous public well be needed, a minimum isolation distance of 150 feet is required between the well and any potential source of contamination, such as a septic tank and sewage disposal area. The Division of Water Resources will consider applications for the construction of on-site wells provided the wells can be located and constructed in compliance with all requirements of the Regulations Governing the Construction and Use of Wells. A well construction permit must be obtained prior to constructing any wells.

Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.

All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take approximately four weeks to process, which allows the necessary time for technical review and advertising.

Should you have any questions concerning these comments, please contact Rick Rios at 302-739-9944.

Sediment and Erosion Control/ Stormwater Management

The DNREC Sediment and Stormwater Program ensure sediment and erosion control plans and stormwater plans comply with local land use ordinances and policies, including the siting of stormwater management facilities. However, DNREC does not support placement in resource protection areas or the removal of trees for the sole purpose of placement of a stormwater management facility/practice.

A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site over 5,000 square feet. Because the Sediment and Stormwater Program is in the process of revising its state regulations it is a good idea to

contact the reviewing agency to schedule a pre-application meeting to discuss the sediment and erosion control and stormwater management components of the plan as soon as practicable. The site topography, soils mapping, pre- and post-development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion. The plan review and approval as well as construction inspection will be coordinated through the Sussex Conservation District. Contact Jessica Watson at the Sussex Conservation District at (302) 856-7219 for details regarding submittal requirements and fees.

Because of the parcel's location in an impaired watershed and the amount of impervious surface, the applicants should incorporate green technology best management practices and low impact development practices to reduce stormwater flow and meet water quality goals, including roof top disconnection from the storm drain system. DNREC appreciates the series of ponds proposed for advanced treatment and protection of wellhead areas. The applicant is proposing to outlet stormwater to an existing tax ditch onsite. A downstream analysis may be required to determine potential impact to up/downstream property owners as a result of this proposed project.

Drainage

The Drainage Program has researched the Tax Ditch rights-of-ways for parcel # 135-23-18. The information is as follows:

- This parcel is within the McGee Tax Ditch watershed and is affected by a tax ditch right-of-way. Prong 1 has a 16.5-foot tax ditch right-of-way on the right side and no right-of-way on the left side from the junction with Sub 2 of Prong 1 (shown on attached map as P1S2) until its terminus. This right-of-way is measured from top of bank, looking upstream.

- This parcel also has a 250-foot tax ditch right-of-way, also on Prong 1 (located on the northern portion of the parcel). This section of Prong 1 has an 80-foot tax ditch right-of-way in the woods on the right side and 250-foot tax ditch right-of-way on the left side. This section of right-of-way is measured from centerline of ditch, looking upstream.

- The tax ditch rights-of-way include the entire width of the ditch.

Contact the DNREC Drainage Program in Georgetown at (302) 855-1930 to discuss impacts to the Tax Ditch and the release of stormwater into the Tax Ditch.

In addition, the Drainage Program has following comments for this site:

- The Drainage Program requests that the engineer take precautions to ensure the project does not hinder any off site drainage upstream of the project or create any off site drainage problems downstream by the release of on site storm water. The Drainage Program requests that the engineer check existing downstream ditches and pipes for function and blockages prior to the construction. Notify downstream landowners of the change in volume of water released on them.

- The Drainage Program encourages the elevation of rear yards to direct water towards the streets and alleyways where storm drains are accessible for maintenance. However, the Drainage Program recognizes the need for catch basins in yards in certain cases. Therefore, catch basins placed in rear and side yards will need to be clear of obstructions and be accessible for maintenance. Decks, sheds, fences, pools, and kennels can hinder drainage patterns as well as future maintenance to the storm drain or catch basin. Deed restrictions, along with drainage easements recorded on deeds, should ensure adequate future maintenance access.

- An increase of the side yard setback to 15 feet may be needed on all properties with a drainage easement on the side. The increase will allow room for equipment to utilize the entire easement and maneuver free of obstructions if the drainage conveyance requires periodic maintenance or future re-construction. The side yard setback would only increase on the side with the drainage easement.

- All catch basins in rear or side yards should have a 10-foot drainage easement around them on all sides. Place restrictions on fences, sheds, and other structures within the easement to prevent obstructions from being place next to the catch basin. Record the easement on the deed.

- Have all drainage easements recorded on deeds and place restrictions on obstructions within the easements to ensure access for periodic maintenance or future re-construction. Future property owners may not be aware of a drainage easement on their property if the easement is only on the record plan. However, by recording the drainage easement on the deed, the second owner, and any subsequent owner of the property, will be fully aware of the drainage easement on their property.

Open Space

The developer is strongly urged to consider alternatives to mowed grass within community open space areas, especially along stormwater management facilities upon

development of this parcel. Mowing and other maintenance costs from lawn areas can become a substantial burden. There may be areas that are appropriate for warm or cool season grasses. The maintenance costs associated with meadow type grasses are much lower than those of lawn grasses, and provide food and habitat for birds and other wildlife and can help reduce non-point source pollution. The developer is encouraged to review "Community Spaces, Natural Places: A guide to restoration, management, and maintenance of community open space". This document provides a reference of practical and successful open space management techniques that emphasize natural landscape alternatives other than turf grass management. The guidebook is available online at: http://www.dnrec.state.de.us/dnrec2000/Divisions/Soil/dcmp/.

Nuisance Geese

Wet ponds created for stormwater management purposes may attract resident Canada geese and mute swans that will create a nuisance for community residents. High concentrations of waterfowl in ponds create water-quality problems, leave droppings on lawn and paved areas and can become aggressive during the nesting season. Short manicured lawns around ponds provide an attractive habitat for these species. Trails around two of the ponds are depicted in the site plan, but it is unclear if an adequate vegetative buffer (not mowed lawn) is going to be left intact around the perimeter as well. DNREC recommends native plantings, including tall grasses, wildflowers, shrubs, and trees at the edge and within an adequate buffer (15-30 feet in width) around the ponds. This type of habitat is not as attractive to geese because their view of the surrounding area is blocked and they can't scan for predators. At this time, they do not recommend using monofilament grids due to the potential for birds and other wildlife to become entangled if the grids are not properly installed and maintained. In addition, the on-going maintenance (removing entangled trash, etc.) can become a burden.

The Division of Fish and Wildlife does not provide goose control services, and if problems arise, residents or the home-owners association will have to accept the burden of dealing with these species (e.g., permit applications, costs, securing services of certified wildlife professionals). Solutions can be costly and labor intensive; however, with a reduction in the number of ponds, proper landscaping, monitoring, and other techniques, geese problems can be minimized.

Underground Storage Tanks

There are five inactive and two active LUST site(s) located near the proposed project:

Cheertraus/Home Services, Facility # 5-000388, Project # S8901001
Georgetown State Service Center, Facility # 5-000701, Project # S9207175

DOT-South District Headquarters, Facility # 5-000408, Project # S0004044
Former Delaware State Police Troop #4, Facility # 5-000417, Project # S9506144
Sussex Correctional Center Pretrial B, Facility # 5-000406, Project # S9512303
Three Bells Market, Facility # 5-000248, Project # S9401005
Artcraft Lighting Center, Facility # 5-000753, Project # S8905242

No environmental impact is expected from the above inactive/active LUST site(s). However, should any underground storage tank or petroleum contaminated soil be discovered during construction, the Tank Management Branch must be notified as soon as possible. It is not anticipated that any construction specifications would need to be changed due to petroleum contamination. However, should any unanticipated contamination be encountered and PVC pipe is being utilized, it will need to be changed to ductile steel with nitrile rubber gaskets in the contaminated areas.

Air Quality

Once complete, vehicle emissions associated with this project are estimated to be 23.9 tons (47,735.3 pounds) per year of VOC (volatile organic compounds), 19.8 tons (39,521.6 pounds) per year of NOx (nitrogen oxides), 5.8 tons (11,626.4 pounds) per year of SO2 (sulfur dioxide), 0.5 ton (1,034.9 pounds) per year of fine particulates and 796.0 tons (1,592,061.6 pounds) per year of CO2 (carbon dioxide).

Emissions from area sources associated with this project are estimated to be 3.8 tons (7,676.8 pounds) per year of VOC (volatile organic compounds), 0.4 ton (844.7 pounds) per year of NOx (nitrogen oxides), 0.4 ton (701.0 pounds) per year of SO2 (sulfur dioxide), 0.5 ton (904.6 pounds) per year of fine particulates and 15.6 tons (31,119.9 pounds) per year of CO2 (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 1.5 tons (3,042.5 pounds) per year of NOx (nitrogen oxides), 5.3 tons (10,582.7 pounds) per year of SO2 (sulfur dioxide) and 780.5 tons (1,560,941.8 pounds) per year of CO2 (carbon dioxide).

	VOC	NOx	SO_2	$PM_{2.5}$	CO_2
Mobile	23.9	19.8	5.8	0.5	796.0
Residential	3.8	0.4	0.4	0.5	15.6
Electrical Power		1.5	5.3		780.5
TOTAL	27.7	21.7	11.5	1.0	1592.1

For this project the electrical usage via electric power plant generation alone totaled to produce an additional 1.5 tons of nitrogen oxides per year and 5.3 tons of sulfur dioxide per year.

A significant method to mitigate this impact would be to require the builder to construct Energy Star qualified homes. Every percentage of increased energy efficiency translates into a percent reduction in pollution. Quoting from their webpage, http://www.energystar.gov/:

"ENERGY STAR qualified homes are independently verified to be at least 30% more energy efficient than homes built to the 1993 national Model Energy Code or 15% more efficient than state energy code, whichever is more rigorous. These savings are based on heating, cooling, and hot water energy use and are typically achieved through a combination of:

building envelope upgrades,
high performance windows,
controlled air infiltration,
upgraded heating and air conditioning systems,
tight duct systems and
upgraded water-heating equipment."

The DNREC Energy Office in is in the process of training builders in making their structures more energy efficient. The Energy Star Program is excellent way to save on energy costs and reduce air pollution. We highly recommend this project development and other residential proposals increase the energy efficiency of their homes.

DNREC also recommends that the home builders offer geothermal and photo voltaic energy options. Applicable vehicles should use retrofitted diesel engines during construction. The development should provide tie-ins to the nearest bike paths, links to mass transit, and fund a lawnmower exchange program for their new occupants.

State Fire Marshal's Office – Contact: Duane Fox 856-5800

These comments are intended for informational use only and do not constitute any type of approval from the Delaware State Fire Marshal's Office. At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

a. **Fire Protection Water Requirements**:
   - Water distribution system capable of delivering at least 1500 gpm for 2-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers.
   - Where a water distribution system is proposed for Storage, Industrial, and/or Mercantile sites, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

b. **Fire Protection Features:**
   - All structures over 10,000 sq.ft. aggregate will require automatic sprinkler protection installed.
   - Buildings greater than 10,000 sq.ft., 3-stories or more, over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements
   - Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
   - Show Fire Lanes and Sign Detail as shown in Delaware State Fire Prevention Regulations
   - For townhouse buildings, provide a section / detail and the UL design number of the 2-hour fire rated separation wall on the Site plan.
   - Most Mini-Storage buildings in excess of 2,500 square feet in area are required to be protected by automatic sprinkler systems.

c. **Accessibility**
   - All premises, which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from the main thoroughfares; namely, County Road 48 must be constructed so fire department apparatus may negotiate it.
   - Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
   - Any dead end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The

minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.

- The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
- The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.

d. **Gas Piping and System Information:**
   - Provide type of fuel proposed, and show locations of bulk containers on plan.

e. **Required Notes**:
   - Provide a note on the final plans submitted for review to read " All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations"
   - Proposed Use
   - Townhouse 2-hr separation wall details shall be shown on site plans
   - Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
   - Square footage of each structure (Total of all Floors)
   - National Fire Protection Association (NFPA) Construction Type
   - Maximum Height of Buildings (including number of stories)
   - Note indicating if building is to be sprinklered
   - Name of Water Provider
   - Letter from Water Provider approving the system layout
   - Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered
   - Provide Road Names, even for County Roads

Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: www.statefiremarshal.delaware.gov, technical services link, plan review, applications or brochures.

Department of Agriculture - Contact: Scott Blaier 698-4500

The Delaware Department of Agriculture has no objections to the proposed development. The *Strategies for State Policies and Spending* encourages environmentally responsible development in Investment Level 1 areas.

Right Tree for the Right Place

The Delaware Department of Agriculture Forest Service encourages the developer to use the "Right Tree for the Right Place" for any design considerations. This concept allows for the proper placement of trees to increase property values in upwards of 25% of appraised value and will reduce heating and cooling costs on average by 20 to 35 dollars per month. In addition, a landscape design that encompasses this approach will avoid future maintenance cost to the property owner and ensure a lasting forest resource. Please feel free to contact the Delaware Forest Serve at (302) 698-4500 for more information.

Native Landscapes

The Delaware Department of Agriculture and the Delaware Forest Service encourages the developer to use native trees and shrubs to buffer the property from the adjacent land-use activities near this site. A properly designed forested buffer can create wildlife habitat corridors and improve air quality to the area by removing six to eight tons of carbon dioxide annually and will clean our rivers and creeks of storm-water run-off pollutants. To learn more about acceptable native trees and how to avoid plants considered invasive to our local landscapes, please contact the Delaware Department of Agriculture Plant Industry Section at (302) 698-4500.

Public Service Commission - Contact: Andrea Maucher 739-4247

Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines. Contact: Malak Michael at (302) 739-4247.

Delaware State Housing Authority – Contact Vicki Powers 739-4263

This proposal is for a site plan review of 36 condos, 88 townhomes, 66,300 sq. ft. of office space and 57,800 sq. ft. of warehouse/mini storage space on 40 acres located on the west side of Sussex County Road 48, 2,400 feet north of Road 48 and Road 321 intersection near Georgetown. According to the State Strategies Map, the proposal is located in an Investment Level 1 area. As a general planning practice, DSHA encourages residential development in areas where residents will have proximity to services, markets, and employment opportunities such as Investment Level 1 and 2 areas outlined in the State Strategies Map. Furthermore, DSHA encourages residential development in Level 1 and 2 areas that are affordable to first time homebuyers. DSHA supports the fact that this proposal targets first time homebuyers. For informational purposes, the most recent real estate data collected by DSHA shows the median income price in Sussex County to be $258,500. However, families earning respectively 100% of Sussex County's median

income only qualify for mortgages of $169,101, thus creating an affordability gap of $89,399. The provision of units within reach of families earning at least 100% of Sussex County's median income would help increase housing opportunities for first time homebuyers.

Department of Education – Contact: John Marinucci 735-4055

This proposed development is within the Indian River School District boundaries. DOE offers the following comments on behalf of the Indian River School District.

1. Using the DOE standard formula, this development will generate an estimated 62 students.
2. DOE records indicate that the Indian River School Districts' *elementary schools* ***are at or beyond*** *100% of current capacity* based on September 30, 2006 elementary enrollment.
3. DOE records indicate that the Indian River School Districts' *secondary schools* ***are not at or beyond*** *100% of current capacity* based on September 30, 2006 secondary enrollment. In multiple correspondences from the Indian River School District administration, the district asserts that while the Indian River High School has capacity, the Indian River Middle Schools' student population exceeds student capacity.
   NOTE: September 30, 2007 District enrollments are in the process of being certified.
4. This development will create additional elementary school and middle school student population growth which will further compound the existing shortage of space. The developer is strongly encouraged to contact the Indian River School District Administration to address the issue of elementary school over-crowding that this development will exacerbate.
5. DOE requests developer work with the Indian River School District transportation department to establish developer supplied bus stop shelter ROW and shelter structures, interspersed throughout the development as determined and recommended by the local school district.

Sussex County – Contact: Richard Kautz 855-7878

The site is within the Georgetown annexation area and is contiguous to land within the corporate limits. The developer should negotiate an agreement for service and annexation by the town.

The Sussex County Engineer Comments:

The Sussex County Engineering Department has no comments regarding this review as the proposed project will be served by the town of Georgetown's wastewater facilities.

For questions regarding these comments, contact Rob Davis, Sussex County Engineering Department at (302) 855-7820.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

Constance C. Holland, AICP
Director

CC: Sussex County